85-1710

Supreme Court, U.S.
FILED
APR 18 1986
JOSEPH F. SPANIOL, JR.
CLERK

No. 85-

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

PETITION FOR A WRIT OF CERTIORARI TO THE MISSOURI COURT OF APPEALS, EASTERN DISTRICT

Of Counsel:

WILLIAM A. RICHTER
LEWIS R. MILLS

PEPER, MARTIN, JENSEN,
MAICHEL & HETLAGE
720 Olive Street
St. Louis, Missouri 63101
(314) 421-3850

RAYMOND M. ASHER
ROGER A. KELLER

MALLINCKRODT, INC.
675 McDonnell Boulevard
St. Louis, Missouri 63134
(314) 895-2906

PETER J. NICKLES*
RICHARD A. MESERVE
WILLIAM F. GREANEY

COVINGTON & BURLING
1201 Pennsylvania Avenue, N.W.
P.O. Box 7566
Washington, D.C. 20044
(202) 662-6000

Attorneys for Petitioner
MALLINCKRODT, INC.

**Counsel of Record*

QUESTION PRESENTED

Whether a federally licensed radiopharmaceutical facility that is operated in full compliance with comprehensive radiological emission standards established by the Nuclear Regulatory Commission can, consistent with the federal preemption of the field of nuclear safety, be subjected to suits for monetary damages on the basis of the planned, periodic emissions of low-level radiation that occur in the normal course of operations.

PARTIES TO THE PROCEEDING

The petitioner herein is Mallinckrodt, Inc.* The parties to the proceedings below not listed in the caption of the case are Frank Fogerty, Vera J. Howell, Charles Wilkerson, Leonard Bodus, Lynn Carroll, Douglas Wesley and Owen Arney, appellants below.

---

* Petitioner is a wholly owned subsidiary of IMC Holdings, Inc., which itself is a subsidiary of International Minerals and Chemical Corp. Petitioner has the following non-wholly owned subsidiaries: Daiichi Radioisotope Laboratories, Ltd.; Mallinckrodt Iberia, S.A.; Bunnell, Inc.; and Orange Medical Instruments.

TABLE OF CONTENTS

	Page
QUESTION PRESENTED	i
PARTIES TO THE PROCEEDING	ii
TABLE OF AUTHORITIES	iv
OPINIONS BELOW	1
JURISDICTION	2
STATUTES AND REGULATIONS INVOLVED	2
STATEMENT OF THE CASE	3
REASONS FOR GRANTING THE PETITION	6
CONCLUSION	16
APPENDIX A	1a
APPENDIX B	29a
APPENDIX C	30a
APPENDIX D	31a
APPENDIX E	33a

TABLE OF AUTHORITIES

	Page
CASES:	
Chicago & North Western Transportation Co. v. Kalo Brick & Tile Co., 450 U.S. 311 (1981)	12
Cipollone v. *Liggett Group, Inc.*, No. 85-5073 (3d Cir. Apr. 7, 1986)	13
Cipollone v. *Liggett Group, Inc.*, 593 F. Supp. 1146 (D.N.J. 1984), *rev'd*, No. 85-5073 (3d Cir. Apr. 7, 1986)	13
Cox Broadcasting Corp. v. Cohn, 420 U.S. 469 (1975)	2
Fidelity Federal Savings & Loan Association v. de la Cuesta, 458 U.S 141 (1982)	12
Johnston v. United States, 597 F. Supp. 374 (D. Kan. 1984)	5
McKay v. United States, 703 F.2d 464 (10th Cir. 1983)	8
Miami Herald Publishing Co. v. Tornillo, 418 U.S. 241 (1974)	2
Pacific Gas & Electric Co. v. State Energy Resources Conservation and Development Commission, 461 U.S. 190 (1983)	7,14
San Diego Building Trades Council v. Garmon, 359 U.S. 236 (1959)	7,12
Silkwood v. Kerr-McGee Corp., 464 U.S. 238 (1984)	4, *passim*
Silkwood v. Kerr-McGee Corp., 667 F.2d 908 (10th Cir. 1981), *rev'd on other grounds*, 464 U.S. 238 (1984)	8
Train v. Colorado Public Interest Research Group, 426 U.S. 1 (1976)	7
STATUTES:	
Atomic Energy Act of 1954,	
42 U.S.C. § 2011 *et seq.*	2, *passim*
42 U.S.C. § 2014(e)	5
42 U.S.C. § 2111	5
42 U.S.C. §§ 2271-2284	6
Price-Anderson Act,	
42 U.S.C. § 2210 *et seq.*	8, *passim*

Page

LEGISLATIVE MATERIALS:

S. Rep. No. 454, 94th Cong., 1st Sess., *reprinted in* 1975 U.S. Code Cong. & Ad. News 2251 10

H.R. Rep. No. 1115, 93d Cong., 2d Sess. (1974) 10

S. Rep. No. 296, 85th Cong., 1st Sess., *reprinted in* 1957 U.S. Code Cong. & Ad. News 1803 9

103 Cong. Rec. 10715 (1957) 10

103 Cong. Rec. 10714 (1957) 10

103 Cong. Rec. 10712 (1957) 10

103 Cong. Rec. 10711 (1957) 10

103 Cong. Rec. 5046 (1957) 10

ADMINISTRATIVE REGULATIONS:

10 C.F.R. Parts 0-170 5

10 C.F.R. Part 20 ..... 2, *passim*

10 C.F.R. § 20.101-.106 and App. B 5

10 C.F.R. § 2.201-.206 6

10 C.F.R. § 2.202(f) 6

10 C.F.R. § 30.33-.34 6

MISCELLANEOUS:

International Comm'n on Radiation Protection, *Recommendations of the International Comm'n on Radiological Protection* (Report No. 26) (1977) 5

American Medical Ass'n, *Risks of Nuclear Energy and Low-Level Ionizing Radiation* (1981) 5

Nat'l Council on Radiation Protection and Measurements, *Basic Radiation Protection Criteria* (Report No. 39) (1971) 5

Nat'l Research Council, Comm. on the Biological Effects of Ionizing Radiation, *The Effects on Populations of Exposure to Low Levels of Ionizing Radiation: 1980* (1980) 4

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

No. 85-

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

PETITION FOR A WRIT OF CERTIORARI TO THE MISSOURI COURT OF APPEALS, EASTERN DISTRICT

Mallinckrodt, Inc. ("Mallinckrodt") petitions this Court for a writ of certiorari to review the judgment of the Missouri Court of Appeals, Eastern District, in this proceeding.

OPINIONS BELOW

The opinion of the Missouri Court of Appeals and its order denying petitioner's motion for rehearing or, in the alternative, for transfer to the Supreme Court of Missouri are reported at 698 S.W.2d 854. App. A, *infra*. The order of the Supreme Court of Missouri denying petitioner's motion for transfer (App. B, *infra*) is not reported. The decision of the trial court (App. C, *infra*) also is not reported.

JURISDICTION

The judgment of the Missouri Court of Appeals was entered on July 16, 1985. A motion for rehearing or, in the alternative, for transfer to the Supreme Court of Missouri was denied by the court of appeals on September 26, 1985. App. A, *infra*, at 27a. A motion for transfer was denied by the Supreme Court of Missouri on November 21, 1985. App. B, *infra*. On February 12, 1986, Justice Blackmun entered an order extending the time for filing a petition for a writ of certiorari to April 19, 1986. The jurisdiction of this Court is invoked pursuant to 28 U.S.C. § 1257(3).[1]

STATUTES AND REGULATIONS INVOLVED

Relevant portions of the Atomic Energy Act of 1954, Pub. L. No. 83-703, 68 Stat. 919, as amended, 42 U.S.C. § 2011 *et seq.* (1982 & Supp. II 1984) are reprinted in App. D, *infra*. Relevant portions of the Act's implementing regulations promulgated by the Nuclear Regulatory Commission ("NRC") and its predecessor, the Atomic Energy Commission ("AEC"), are reprinted in App. E, *infra*, and are codified at 10 C.F.R. Part 20 (1985).

---

[1] Although this case has been remanded for further proceedings in the trial court, the holding of the court of appeals that respondents' suit is not preempted by federal law constitutes a conclusive determination of a dispositive federal issue by the Missouri courts. No other federal issues remain to be decided. It is well established that where a federal issue has been finally decided by the appellate courts of a State, and where reversal of the state court on the federal issue would both obviate the need for further litigation and prevent the erosion of an important federal policy, the judgment or decree of the state court is considered "final" for purposes of 28 U.S.C. § 1257. *See, e.g.*, Cox Broadcasting Corp. v. Cohn, 420 U.S. 469, 476-487 (1975); Miami Herald Publishing Co. v. Tornillo, 418 U.S. 241 (1974). Because the Missouri court's decision on the federal preemption issue will, if allowed to stand, have a serious adverse impact on important federal policies established in the Atomic Energy Act, it is ripe for review in this Court.

STATEMENT OF THE CASE

This case originated as a class action lawsuit filed in the Circuit Court of St. Louis County, Missouri. The named plaintiffs (respondents herein) purport to represent a class of persons who have worked or will work in the vicinity of a radiopharmaceutical processing plant operated by Mallinckrodt in Maryland Heights, Missouri. In their petition, respondents seek compensatory and punitive damages of $1 billion and broad injunctive relief,[2] on the ground that low-level radiation emitted by Mallinckrodt's plant in the normal course of operations allegedly presents a health hazard. Respondents assert common-law tort theories of negligence, assault and battery, and "ultrahazardous activities."

A. The Proceedings Below

Mallinckrodt moved the trial court to dismiss respondents' petition,[3] contending, *inter alia*, that the suit was preempted by the comprehensive and exclusive scheme of federal regulation of Mallinckrodt's radiopharmaceutical operations under the Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2011 *et seq.* On August 18, 1983, the trial court dismissed the suit on the grounds that the court lacked subject matter jurisdiction and that the petition failed to state a claim upon which relief could be granted. App. C, *infra*. Respondents thereafter appealed the dismissal to the Missouri Court of Appeals, Eastern District.

On appeal, Mallinckrodt argued that tort recovery was preempted because of the comprehensive federal regulatory control of nuclear safety. Respondents' petition contained no allegation that they had sustained any injury as a result of a "nuclear incident" — a significant accidental release of radiation that exceeded the federal exposure and emission limits applicable to Mallinckrodt's plant. Moreover, Mallinckrodt argued that permitting the case to proceed when no violation had been alleged of federal exposure and emission standards

---

[2] In particular, respondents seek an injunction requiring Mallinckrodt to cease its radiopharmaceutical operations and to provide free medical care to the members of the alleged class.

[3] The document that would constitute a complaint in a federal court is termed a "petition" in the Missouri courts.

would create an irreconcilable conflict between federal and state regulatory standards and would frustrate the developmental objectives of the Atomic Energy Act.

On July 16, 1985, the Missouri Court of Appeals issued an opinion reversing the trial court's dismissal of the petition. App. A, *infra*, at 1a-26a. The court agreed with Mallinckrodt's contention that injunctive relief against a federally licensed nuclear facility was barred by the doctrine of federal preemption. *Id.* at 26a. However, the court concluded that respondents' claims for damages were not barred even if Mallinckrodt's plant was operated in full compliance with federal safety requirements. *Id.* at 2a-14a. The Missouri court purported to derive its conclusions from this Court's decision in *Silkwood* v. *Kerr-McGee Corp.*, 464 U.S. 238 (1984), which held that a common-law award of punitive damages against the operator of a nuclear facility for property damage caused by the accidental escape of radioactive material was not preempted by federal law.

Mallinckrodt sought rehearing on the federal preemption issues before the court of appeals. The motion for rehearing or, alternatively, for transfer to the Supreme Court of Missouri was denied in a brief order. App. A, *infra*, at 27a. A subsequent motion for transfer was summarily denied by the Supreme Court of Missouri. App. B, *infra*.

B. The Comprehensive Framework of Federal Safety Regulations Governing Mallinckrodt's Operations

Mallinckrodt's plant is engaged in the production of various radiopharmaceuticals for use in the practice of nuclear medicine. Radiopharmaceuticals are diagnostic and therapeutic agents containing radioisotopes that are injected into the body under the supervision of licensed physicians trained in nuclear medicine. Over 10,000 physicians are licensed to administer radiopharmaceuticals to patients in the United States, and at least 10-12 million doses are administered each year.[4]

---

[4] *See* Nat'l Research Council, Comm. on the Biological Effects of Ionizing Radiation, *The Effects on Populations of Exposure to Low Levels of Ionizing Radiation: 1980* 47-49 (1980).

The radioisotopes processed at Mallinckrodt's plant constitute "byproduct material," a nuclear material specifically regulated under the Atomic Energy Act. *See* 42 U.S.C. §§ 2014(e), 2111. Mallinckrodt is therefore required to maintain an operating license from the NRC, and its plant is subject to an array of federal regulations governing matters of nuclear safety.

The NRC and its predecessor, the AEC, have promulgated extensive regulations establishing detailed standards to protect the public from any radiation hazards that could result from the operation of nuclear facilities. *See, e.g.*, 10 C.F.R. Part 20 (1985).[5] Of particular relevance here, these comprehensive safety regulations include strict limitations on permissible exposures to radiation for both workers and the general public, and specify maximum permissible concentrations of some 400 different radionuclides (including those commonly utilized in nuclear medicine) in air or water in "restricted" (i.e., on-site) areas and in releases to "unrestricted" (i.e., public or off-site) areas. *See* 10 C.F.R. § 20.101-.106 and App. B (1985) (App. E, *infra*). These basic federal emission and exposure standards have been set far below the level at which adverse health effects have ever been observed.[6]

---

[5] The provisions of Part 20 fit within a broader regulatory framework governing the possession, use, processing, storage, transfer, packaging and disposal of nuclear materials. *See* 10 C.F.R. Parts 0-170 (1985).

[6] *See, e.g.*, Johnston v. United States, 597 F.Supp. 374, 390-392, 423 (D. Kan. 1984) (expert medical and scientific testimony establishes that the only evidence of a carcinogenic effect from exposure to radiation occurs at levels of exposure roughly 100-200 times greater than the annual NRC exposure limit for members of the general public); *see also id.* at 377.

The NRC standards are fully consistent with the radiation protection recommendations of major medical and health physics organizations, including the International Commission on Radiation Protection ("ICRP"), the National Council on Radiation Protection and Measurements ("NCRP") and the American Medical Association ("AMA"). *See* ICRP, *Recommendations of the International Comm'n on Radiological Protection* (Report No. 26) (1977); NCRP, *Basic Radiation Protection Criteria* (Report No. 39) (1971); AMA, *Risks of Nuclear Energy and Low-Level Ionizing Radiation* 27 (1981).

Mallinckrodt must conform to these NRC standards in order to continue to operate. Moreover, it must conduct its operations under the terms of an NRC license that imposes additional conditions on the possession, use, storage and disposal of its radiopharmaceutical products. *See* 10 C.F.R. § 30.33-.34. The NRC conducts regular inspections of Mallinckrodt's plant to assure compliance with safety regulations and licensing requirements.

Violations of the Atomic Energy Act, the implementing regulations, or the license conditions can lead to the imposition of severe civil and criminal fines and other penalties. *See* 42 U.S.C. §§ 2271-2284. In addition, the NRC has been authorized to initiate proceedings to modify, suspend or even revoke any license issued under the Act. 10 C.F.R. § 2.201-.206. In an appropriate emergency, any such proposed action becomes effective immediately. *Id.* § 2.202(f).

REASONS FOR GRANTING THE PETITION

This case presents a legal issue of profound importance in defining the appropriate role of federal and state authority in the nuclear energy field: whether a licensed nuclear facility operated in full compliance with comprehensive federal safety standards can be liable under state tort law for the planned, federally authorized releases of radiation that occur in the normal course of operations. The issue is also of critical importance to the commercial nuclear industry because the decision of the state court, if allowed to stand, could significantly inhibit the development and use of nuclear technology for peaceful purposes in the United States.

As demonstrated below, the Missouri court's decision is inconsistent with the structure and purpose of the Atomic Energy Act and with recent decisions of this Court construing the broad scope of federal preemption of nuclear safety. Although the Missouri court stated that its decision was compelled by this Court's holding in *Silkwood* v. *Kerr-McGee Corp.*, 464 U.S. 238 (1984),[7] neither the facts nor the reasoning of *Silkwood* provide support for the Missouri court's decision.

[7] App. A, *infra*, at 14a.

Accordingly, Mallinckrodt respectfully requests that this Court review the decision both to clarify its prior preemption decisions and to protect the integrity of the federal regulatory scheme governing matters of nuclear safety.

A. State Tort Remedies Against Licensed Nuclear Facilities Are Available Only in the Event of a "Nuclear Incident."

This Court repeatedly has emphasized that the comprehensive federal regulation of radiation hazards established under the Atomic Energy Act has broadly preempted *all* state regulation of nuclear safety.[8] In *Pacific Gas & Electric Co.* v. *State Energy Resources Conservation and Development Commission*, 461 U.S. 190, 212 (1983), the Court characterized the sweeping federal preemption of the field of nuclear safety in the following terms:

> State safety regulation is not preempted only when it conflicts with federal law. Rather, the federal government *has occupied the entire field of nuclear safety concerns*, except the limited powers expressly ceded to the states.

(Emphasis added).

This Court has also held that an award of monetary damages can serve as a potent means of exercising regulatory control. *See San Diego Building Trades Council* v. *Garmon*, 359 U.S. 236, 247 (1959). Accordingly, one of the necessary corollaries of the sweeping federal preemption of nuclear safety is that common-law actions for damages against nuclear facilities are generally prohibited by federal law.

---

[8] *See, e.g.*, Silkwood v. Kerr-McGee Corp., 464 U.S. at 250 (Congress "prohibit[ed] the States from regulating the safety aspects of nuclear development" because the NRC "was more qualified to determine what type of safety standards should be enacted in this complex area"); Train v. Colorado Pub. Interest Research Group, 426 U.S. 1, 17 (1976) (despite congressional amendments establishing limited exceptions to preemption of state regulation by the Atomic Energy Act, "the exclusive regulatory scheme created by the [Act] for source, byproduct, and special nuclear materials was to remain unaltered").

In the Price-Anderson Act,[9] however, Congress recognized a narrow exception to this general principle of broad federal preemption of state regulation of nuclear safety. The Price-Anderson Act established a government indemnification scheme and limited the liability of certain nuclear facilities for damages arising from a "nuclear incident."[10] The overall design of the Act established that private rights of action under state tort law could exist in the event of such an incident.

In light of the Price-Anderson Act, courts have held that compensatory damages can be recovered under state tort law for injuries and property damage caused by a "nuclear incident."[11] However, this exception to the general rule of preemption is a narrow one. Indeed, the recent decision of this Court in *Silkwood* demonstrates that a "nuclear incident" triggering common-law damages liability is synonymous with a nuclear accident.

In *Silkwood*, the decedent's estate sought compensatory and punitive damages for injuries and property damage resulting from the escape of plutonium (a dangerous radioactive substance) from a Kerr-McGee nuclear plant. Silkwood had been contaminated by plutonium on three successive days. 464 U.S. at 241-242. The contamination level in her apartment was sufficiently extensive to require the destruction of many of her personal belongings. *Id.* at 242. Although the precise circumstances surrounding the contamination were never conclusively determined, the jury returned a verdict in favor of Silkwood's estate and awarded the estate both compensatory and punitive damages. *Id.* at 243, 245.

Kerr-McGee appealed the punitive damages award, contending that such awards served to regulate nuclear safety and should be preempted. Although the Tenth Circuit agreed with Kerr-McGee's analysis, this Court ultimately held that the

---

[9] 42 U.S.C. § 2210 *et seq.*

[10] Although the Act applies only to a limited class of nuclear facilities, its legislative history contains a revealing congressional discussion of the relationship between the Atomic Energy Act and state tort remedies.

[11] *See, e.g.*, McKay v. United States, 703 F.2d 464, 468-469 (10th Cir. 1983); Silkwood v. Kerr-McGee Corp., 667 F.2d 908 (10th Cir. 1981), *rev'd on other grounds*, 464 U.S. 238 (1984).

punitive damages award was not preempted. The Court emphasized that despite the broad federal preemption of nuclear safety, Congress never intended to prohibit the states from providing common-law tort remedies "for those injured by illegal conduct" of nuclear licensees. 464 U.S. at 251. After examining the legislative history of the Price-Anderson Act, the Court concluded that Congress intended to preserve some state tort remedies against operators of nuclear facilities, but *only* for injuries caused by a "nuclear incident" — an unplanned or accidental release of radioactive materials. The Court observed:

> [T]he discussion preceding [the] enactment and subsequent amendment [of the Price-Anderson Act] indicates that Congress assumed that *persons injured by nuclear accidents* were free to utilize existing state tort law remedies.

Id. at 251-252 (emphasis added) (footnote omitted). Similarly, when summarizing congressional deliberations concerning the Price-Anderson Act, the Court noted:

> In sum, it is clear that in enacting and amending the Price-Anderson Act, Congress assumed that state-law remedies, in whatever form they might take, were available to *those injured by nuclear incidents.*

Id. at 256 (emphasis added). In short, the Court was careful to distinguish between claims arising from "nuclear incidents," which are not preempted, and all other common-law tort claims, which are subject to the preemptive strictures of the Atomic Energy Act.

The legislative history of the Price-Anderson Act confirms this Court's holding in *Silkwood* that Congress intended to preserve only those tort suits that result from a significant *accidental* release of radiation into the surrounding environment. The Joint Committee Report on the proposed bill states that its purpose was to address the largely hypothetical problem of uninsurable liability "in the remote event of a reactor meltdown with the resulting release of fission products and radioactive materials into the air." S. Rep. No. 296, 85th Cong., 1st Sess. 2, *reprinted in* 1957 U.S. Code Cong. & Ad.

News 1803, 1804. During the legislative hearings and debates, reference was continually made to the need to protect the public from the potentially disastrous consequences of nuclear accidents involving *unplanned releases* of massive amounts of radiation.[12] The principal House sponsor of the bill stated that its primary purpose was "to see that the public is protected in the unlikely event of a runaway reactor." 103 Cong. Rec. 10711 (1957) (remarks of Rep. Price).

When Congress extended the Price-Anderson Act in 1975, the Joint Committee once again confirmed that the term "nuclear incident" is synonymous with accidental releases of large amounts of radiation.[13] In fact, the terms "nuclear incident" and "nuclear accident" are used interchangeably throughout the committee reports.

Thus, contrary to the Missouri court's assumption here, Congress has never intimated that the planned, routine release of low levels of radiation by a nuclear facility in the normal course of operations and in conformity with federal emission and exposure standards could trigger common-law tort liability. Throughout its deliberations on the Price-Anderson Act, Congress consistently assumed that state tort remedies would be available *only* in the unlikely event of a nuclear accident involving a significant unintentional release of radiation into the

---

[12] *See, e.g.*, 103 Cong. Rec. 10712 (1957) (statement of Rep. Cole) (principal focus of Joint Committee was on "this question of protecting the public against any *unforeseen accident*") (emphasis added); *id.* at 10714 (remarks of Rep. Holifield) (discussing "unplanned and unexpected accidents" such as a reactor meltdown "releas[ing] radioactive clouds of gas and contaminated material in solid or liquid form into the countryside"); *id.* at 10715 (remarks of Rep. Holifield) ("they call [a runaway reactor] a nuclear 'incident', I call it an accident"); *id.* at 5046 (remarks of Rep. Vanik) (noting AEC's concern over "possibility of a catastrophic accident in the newly proposed private enterprise atomic energy establishments").

[13] *See, e.g.*, S. Rep. No. 454, 94th Cong., 1st Sess. 2, *reprinted in* 1975 U.S. Code Cong. & Ad. News 2251 (Act designed to afford compensation "in the unlikely event of a catastrophic nuclear accident"); H.R. Rep. No. 1115, 93d Cong., 2d Sess. 7 (1974) (Act intended to protect against "highly improbable severe nuclear incident"); *id.* at 28 (statement of Rep. Roncalio) ("cornerstone" of Act's coverage is to provide prompt compensation to "victims of a nuclear accident").

surrounding environment. Outside of that narrow range of circumstances, all common-law tort actions against licensed nuclear facilities remain barred by the sweeping federal preemption of nuclear safety.

This Court's decision in *Silkwood* is perfectly consistent with these controlling expressions of congressional intent. *See* pp. 8-9 *supra*. Indeed, the Court emphasized in *Silkwood* that its decision upholding a damages award against the operator of a nuclear facility was limited to the unusual facts presented — the unauthorized escape of highly toxic plutonium resulting in the contamination of Karen Silkwood's home and possessions. 464 U.S. at 241-242, 256.

In sharp contrast to the facts underlying *Silkwood*, respondents' petition contains no allegation of any nuclear incident involving a significant accidental release of radiation from Mallinckrodt's plant. Instead, respondents' suit seeks recovery solely on the basis of planned, periodic emissions that are a normal and necessary component of Mallinckrodt's authorized operations. As such, this case falls squarely within the preempted field of exclusive federal authority over matters of nuclear safety.

B. Tort Recovery Would Create An Irreconcilable Conflict Between Federal and State Safety Standards and Would Frustrate the Objectives of the Atomic Energy Act.

This Court also concluded in *Silkwood* that even if a suit results from a nuclear incident, federal law might nonetheless preempt recovery of damages based on state law. 464 U.S. at 256. The Court held that the test for determining whether preemption applies in such cases consists of two factors:

> . . . whether there is an irreconcilable conflict between the federal and state standards or whether the imposition of a state standard in a damages action would frustrate the objectives of the federal law.

Id. These tests compel the conclusion that respondents' suit is preempted.

The Missouri court concluded that respondents' suit did not create an irreconcilable conflict with federal safety stan-

dards on the basis that "payment of damages and compliance with federal safety standards are clearly possible." App. A, *infra*, at 8a.[14] But the theoretical *possibility* of compliance with federal and state regulatory standards has never been viewed as the determinative factor in assessing the applicability of federal preemption. *See, e.g., Fidelity Federal Savings & Loan Association* v. *de la Cuesta*, 458 U.S. 141, 155 (1982). Moreover, the Missouri court's constricted focus on the physical possibility of compliance with dual regulatory standards ultimately proves too much. If the court's approach were correct, state damage awards could never be found to create an irreconcilable conflict with a federal regulatory scheme, because it is at least theoretically possible for any regulated entity to comply with federal safety standards and to pay damages as well. Under the Missouri court's analysis, state damage awards would *never* be subject to federal preemption. The existing law is clearly to the contrary. *See, e.g., Chicago & North Western Transportation Co.* v. *Kalo Brick & Tile Co.*, 450 U.S. 311 (1981); *San Diego Building Trades Council* v. *Garmon*, 359 U.S. at 247.

Because the Missouri court focused solely on the theoretical possibility that Mallinckrodt could comply with both federal and state safety requirements, it failed to recognize the irreconcilable conflict between federal and state safety standards that is presented by respondents' suit. The NRC has established strict (but non-zero) emission and exposure limits for the radionuclides used in Mallinckrodt's operations. *See* pp. 5-6 *supra*. If a radiopharmaceutical facility operating in full compliance with these federal limits could be subjected to billion-dollar damage claims for its routine emissions, the states would effectively establish a zero-release standard for all nuclear licensees. This is so because, if the permissiblity of a release were to be determined after the fact by a jury, a licensee could protect itself from liability only by preventing all emissions. But the imposition of such a zero-release standard would irreconcilably conflict with the NRC's countervailing judgment

[14] The court also noted that "Mallinckrodt can continue to meet federal standards, and, if found wanting by state standards, simply pay the piper." *Id.*

(embodied in 10 C.F.R. Part 20) that a zero-release standard is *not* necessary to protect the public.[15]

Because an accidental release of radiation almost invariably involves a violation of the strict federal emission standards, it was not unreasonable for Congress to conclude that state-law damage actions should be permitted in the event of a nuclear incident. Indeed, as this Court implicitly recognized in *Silkwood*, the recovery of damages under the highly unusual facts presented in that case served to *reinforce* federal emission and exposure standards by penalizing a licensee for

---

[15] The Missouri court may have been led astray by its heavy reliance on the district court decision in Cipollone v. Liggett Group, Inc., 593 F.Supp. 1146 (D.N.J. 1984). It praised the *Cipollone* court's discussion of the preemption doctrine for its "scholarly detail." App. A, *infra*, at 2a n.1. Moreover, it cited *Cipollone* in support of the incredible proposition that "common law liability does not impose requirements on Mallinckrodt" — a proposition that the Missouri court candidly acknowledged "may appear to be disingenuous and smack of sophistry." *Id.* at 8a. The theoretical underpinnings for the Missouri court's decision recently collapsed when the Third Circuit unanimously reversed the district court decision. Cipollone v. Liggett Group, Inc., No. 85-5073 (3d Cir. Apr. 7, 1986).

Cipollone involved state tort claims that were premised on the assertion that certain manufacturers and sellers of cigarettes had failed to provide an adequate warning of the full spectrum of health risks caused by smoking. Although cigarette packages have included a warning label with wording that is required by federal law, the district court struck the defendants' preemption defense on the same theory applied by the Missouri court here, *i.e.*, that there was no irreconcilable conflict between federal and state safety standards because a defendant can comply with federal law and still pay state-authorized damages. 597 F.Supp. at 1167. The Third Circuit reversed, finding that "where the success of a state law damage claim necessarily depends on the assertion that a party bore the duty to provide a warning to consumers in addition to the warning Congress has required on cigarette packages, such claims are preempted as conflicting with the [Federal Cigarette Labeling and Advertising] Act." Slip op. at 13.

Precisely the same reasoning should have been applied here. Respondents' claims are premised on the theory that Mallinckrodt bears a duty to meet state emission requirements in addition to those imposed by federal law. Accordingly, their claims are preempted.

property damage caused by the unauthorized escape of nuclear material.[16] 464 U.S. at 251-258. Here, by contrast, even a licensee that has fully complied with federal safety standards could be subjected to burdensome claims for damages. Allowing respondents' suit to proceed under these circumstances thoroughly undermines the existing federal regulatory scheme and directly conflicts with Congress' express intent to prohibit dual regulation of the field of nuclear safety.[17]

The recovery of damages in this case also would frustrate the developmental objectives of the Atomic Energy Act. In *Pacific Gas & Electric Co.* v. *State Energy Resources Conservation & Development Commission*, this Court stated:

> There is little doubt that a primary purpose of the Atomic Energy Act was, and continues to be, the promotion of nuclear power. The Act itself states that it is a program "to encourage widespread participation in the development and utilization of atomic energy for peaceful purposes to the maximum extent consistent with the common defense and security and with the health and safety of the public" . . . . The House and Senate Reports confirmed that it was "a major policy goal of the United States" that the involvement of private industry would "speed the further development of the peaceful uses of atomic energy" . . . .

---

[16] Although some of the evidence presented at the *Silkwood* trial suggested that Kerr-McGee complied with most federal safety regulations, 464 U.S. at 244, Kerr-McGee stipulated that the plutonium which caused the contamination of Silkwood's residence came from its plant. *Id.* at 243. Moreover, the jury was presented with evidence indicating that plutonium levels found in Silkwood's apartment may have "exceeded that permitted in an unrestricted area such as a residence." *Id.*

[17] *See* Silkwood v. Kerr-McGee Corp., 464 U.S. at 265 (Blackmun, J., dissenting) ("It is incredible to suggest that Congress intended the Federal Government to have the sole authority to set safety regulations, but left intact the authority of States to require adherence to a different state standard through the imposition of jury fines").

461 U.S. at 221. *See also Silkwood* v. *Kerr-McGee Corp.*, 464 U.S. at 281 (Powell, J., dissenting).

This developmental policy will be entirely frustrated if licensees could be subjected to damage claims for alleged injuries arising from emissions in total compliance with applicable federal standards. Indeed, the decision opens the door to a proliferation of common-law damage claims against a wide array of nuclear facilities ranging from commercial reactors to hospitals utilizing x-ray machines.[18] Although the Missouri court assumes that licensees will simply absorb the cost of expanded tort liability (App. A, *infra*, at 7a-8a), a more plausible conclusion is that the unlimited exposure to tort liability foreshadowed by the opinion below will induce many licensees to curtail or abandon their operations, further discourage investment in nuclear technology, and generally inhibit the development and use of nuclear energy on a national scale.

In sum, respondents' suit creates a stark and irreconcilable conflict with an exclusive federal regulatory scheme, and serves impermissibly to frustrate the primary developmental objectives of the Atomic Energy Act. The decision of the Missouri court is based on a misreading of this Court's preemption analysis in *Silkwood* and other cases, and ignores clear expressions of congressional intent to preclude such intrusive state regulation of nuclear safety. As a result, the decision threatens to have a profoundly adverse impact on the integrity of the federal regulatory system and on the viability of the nuclear energy industry.

---

[18] The Missouri court's broad analysis suggests that analogous claims to those raised here could be brought against hospitals, radiologists, specialists in nuclear medicine or the operators of any nuclear facility.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,

Of Counsel:

WILLIAM A. RICHTER
LEWIS R. MILLS

PEPER, MARTIN, JENSEN,
MAICHEL & HETLAGE
720 Olive Street
St. Louis, Missouri 63101
(314) 421-3850

RAYMOND M. ASHER
ROGER A. KELLER

MALLINCKRODT, INC.
675 McDonnell Boulevard
St. Louis, Missouri 63134
(314) 895-2906

PETER J. NICKLES*
RICHARD A. MESERVE
WILLIAM F. GREANEY

COVINGTON & BURLING
1201 Pennsylvania Avenue, N.W.
P.O. Box 7566
Washington, D.C. 20044
(202) 662-6000

Attorneys for Petitioner
MALLINCKRODT, INC.

**Counsel of Record*

April 1986

APPENDIX

APPENDIX A

IN THE

Missouri Court of Appeals

Eastern District

DIVISION ONE

No. 47771

SAMUEL F. BENNETT, *et al.*,
Plaintiffs-Appellants,

vs.

MALLINCKRODT, INC.,
Defendant-Respondent.

Appeal from the Circuit Court of St. Louis County

Opinion Filed:
July 16, 1985

Plaintiffs appeal from the trial court's dismissal of their petition. We reverse and remand.

In their petition, plaintiffs allege they are representatives of a class who have worked or will work on property adjacent to a radiopharmaceutical processing plant operated by defendant, Mallinckrodt, Inc. (Mallinckrodt). Alleging injuries to their physical and mental health from exposure to radioactive emissions released by the plant, plaintiffs seek damages from Mallinckrodt based on three theories of common law tort: negligence, assault and battery and strict liability for "ultrahazardous activities." In the trial court, Mallinckrodt filed a motion to dismiss, arguing that plaintiffs' action was barred (1) by the federal preemption doctrine, (2) by the political question doctrine and (3) by the action being based upon mere speculative possibilities of future harm. The trial court dis-

missed plaintiffs' petition on two grounds: the court lacked subject matter jurisdiction and the petition failed to state a claim upon which relief could be granted.

We disagree with the trial court. The court does have subject matter jurisdiction, and plaintiffs' petition, although not artfully drawn, does state a claim upon which relief can be granted.

The issues before us are the same three issues which were before the trial court. We address them in order.

FEDERAL PREEMPTION

The doctrine of federal preemption springs from the Supremacy Clause of the United States Constitution, U.S. Const., Art. VI, cl. 2. *E.g., Fidelity Fed. Savings & Loan Ass'n v. de la Cuesta*, 458 U.S. 141, 152, 102 S. Ct. 3014, 3022, 73 L. Ed.2d 664 (1982). The question of whether federal law preempts state action is " 'largely one of statutory construction' " and, therefore, cannot be resolved by general formulas. *Cipollone v. Liggett Group, Inc.*, 593 F. Supp. 1146, 1150 (D.N.J. 1984).[1] Certain principles, however, have been clearly established. First, federal law may expressly preempt state law. *Northern States Power Co. v. Minnesota*, 447 F.2d 1143, 1145-46 (8th Cir. 1971), *aff'd*, 405 U.S. 1035, 92 S. Ct. 1307, 31 L. Ed.2d 576 (1972), or, state law in a given area may be preempted by Congress' implied intent to occupy that area. *E.g., Fidelity Fed.*, 458 U.S. at 153, 102 S. Ct. at 3022; *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230, 67 S. Ct. 1146, 1152, 91 L. Ed. 1447 (1947). Even if Congress has not entirely displaced state regulation in a given area, state law may still be preempted to the "extent it actually conflicts with federal law, that is, when it is impossible to comply with both state and federal law . . ., or where the state law stands as an obstacle to the accomplishment of the full purposes and objectives of Congress . . . ." *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 104 S. Ct. 615, 621, 78 L. Ed.2d 443 (1984).

---

[1] In *Cipollone*, the court describes the development and application of the preemption doctrine in scholarly detail.

Congressional intent pertaining to nuclear energy surfaces in the Atomic Energy Act and its amendments. Until 1954, the development of nuclear energy was a federal monopoly. *See* Atomic Energy Act of 1946, Pub. L. No. 79-585, 60 Stat. 755. With the enactment of the Atomic Energy Act of 1954, ch. 1073, 68 Stat. 919. codified as amended, 42 U.S.C. §§ 2011-2284 (1982), private industry was encouraged to take part in the development and utilization of nuclear energy for peaceful purposes. The federal government, however, retained extensive control over this development by means of a licensing scheme administered by the Atomic Energy Commission, AEC, the predecessor of the present Nuclear Regulatory Commission, NRC.

In 1959, Congress amended the Atomic Energy Act and authorized the NRC to turn over some regulatory authority to those states that adopted a suitable regulatory program, *see* 42 U.S.C. § 2021, but states were still precluded from regulating the safety aspects of nuclear development, *see* 42 U.S.C. § 2021(k). *See also Pacific Gas & Electric Co. v. State Energy Resources Conservation & Development Comm.*, 461 U.S. 190, 205, 103 S. Ct. 1713, 1722, 75 L. Ed.2d 752 (1983); *Northern States Power Co.*, 447 F.2d at 1153-54; *State ex rel. Utility Consumers Council v. Public Service Comm.*, 562 S.W.2d 688, 698 (Mo. App.), *cert. denied*, 439 U.S. 866, 99 S. Ct. 192, 58 L. Ed.2d 177 (1978).

Congress also amended the Atomic Energy Act in 1957 by passing the Price-Anderson Act, Pub. L. No. 85-256, 71 Stat. 576 (1957), to encourage private enterprise to participate in the nuclear industry. Companies contemplating entry into the field had expressed considerable concern over the possibility of a nuclear accident with concomitant bankrupting liability. *See Silkwood v. Kerr-McGee Corp.*, 104 S. Ct. at 623; S. Rep. No. 296, *reprinted in* 1957 U.S. Code Cong. & Ad. News 1803, 1816. Through financial protection and indemnification provisions, the Price-Anderson Act attempted to alleviate this concern by shielding the nuclear industry while safe guarding the public financially. As a result, the Act requires certain licensees to purchase private insurance to cover liability claims, 42 U.S.C. § 2210(a), (b), provides government indemnity for those

licensees, 42 U.S.C. § 2210(c), (d), and establishes maximum limits on liability for nuclear incidents,[2] 42 U.S.C. § 2210(e). *See also Silkwood v. Kerr-McGee Corp.*, 667 F.2d 908, 921 (10th Cir. 1981). Then, in response to a concern that many states would not apply strict liability to radiation injuries, Congress again amended the Act in 1966 and required all indemnified nuclear facilities to waive certain legal defenses such as contributory negligence and governmental immunity in the event of an extraordinary nuclear occurrence.[3] *See* 42 U.S.C. § 2210(n).[4]

The enactment of the Price-Anderson Act and its subsequent amendments triggered an extensive legislative history concerning the relationship between federal statutes pertaining to the nuclear industry and state tort law. No less an authority than the United States Supreme Court has interpreted this history and defined this relationship for us. *See, e.g., Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 104 S. Ct. 615, 78 L. Ed.2d 443 (1984); *Pacific Gas & Electric Co. v. State Energy Resources Conservation & Development Comm'n*, 461 U.S. 190, 103 S. Ct. 1713, 75 L. Ed.2d 752 (1983).

The Supreme Court has declared, in essence, that states are precluded from regulating the safety aspects of nuclear development and of hazardous nuclear materials. *Pacific Gas &*

---

[2] The term "nuclear incident" means:

> "any occurrence, including an extraordinary nuclear occurrence . . . causing . . . bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material . . . ." 42 U.S.C. § 2014(q).

[3] The term "extraordinary nuclear occurrence" means:

> "any event causing a discharge or dispersal of source, special nuclear, or byproduct material from its intended place of confinement in amounts offsite, or causing radiation levels offsite, which the Commission determines to be substantial, and which the Commission determines has resulted or will probably result in substantial damages to persons offsite or property offsite." 42 U.S.C. 2014(j).

[4] Nothing of record shows Mallinckrodt is licensed by the NRC under the Price-Anderson Act.

Electric Co., 461 U.S. at 205, 103 S. Ct. at 1722; *Silkwood*, 104 S. Ct. at 622. This prohibition is premised on Congress' belief that the NRC is more qualified than the individual states to determine what type of safety standards should be enacted in this complex area. *Silkwood*, 104 S. Ct. at 622. Acknowledging Congress' concern over the state's inability to formulate effective safety standards, the Court in *Silkwood*, nonetheless, found "ample evidence" in the legislative history that Congress had no intention of forbidding states from providing tort remedies for injuries caused by nuclear radiation. *Id.* at 623. For example, the Court quoted from Senate Report No. 296 which explains the Price-Anderson Act does not interfere with state tort law until there is a likelihood that damages would exceed the amount of financial responsibility required together with the amount of federal indemnity. Up to this threshold point, the rights of injured parties are established and defined by state law. *Id.* at 623. *See also* S. Rep. No. 296, 1957 U.S. Code Cong. & Ad. News 1803, 1810.[5]

As a result, "[s]tate law remedies, in whatever form they might take, [are] available to those injured by nuclear incidents." *Silkwood*, 104 S. Ct. at 625. Consequently, the mere fact the federal government has occupied the field of safety

---

[5] The Court also cited Senate Report No. 1605 which reiterates this principle:

> Since its enactment by Congress in 1957 one of the cardinal attributes of the Price-Anderson Act has been its minimal interference with State law. Under the Price-Anderson system, the claimant's right to recover from the fund established by the act is left to the tort law of the various States; the only interference with State law is a potential one, in that the limitation of liability feature of the act would come into play in the exceedingly remote contingency of a nuclear incident giving rise to damages in excess of the amount of financial responsibility required together with the amount of the governmental indemnity. S. Rep. No. 1605, 1966 U.S. Code Cong. & Ad. News 3201, 3206.

does not foreclose state remedies for radiation injuries. Rather, the test for determining preemption in the nuclear energy field is:

> "[1] whether there is an irreconcilable conflict between the federal and state standards or [2] whether the imposition of a state standard in a damages action would frustrate the objectives of the federal law." *Silkwood*, 104 S. Ct. at 626.

THE RECORD

Mallinckrodt contends plaintiffs' action irreconcilably conflicts with federal standards and also frustrates federal objectives. A fact essential to this contention is Mallinckrodt's compliance with federal statutes and regulations. This fact, however, has neither been pleaded nor proved.

Plaintiffs have not alleged Mallinckrodt's compliance with federal statutes or regulations, nor is this fact implicit in any of plaintiffs' claims. Moreover, Mallinckrodt has not filed an answer to plaintiffs' petition, nor has it filed a motion for summary judgment based upon facts established by affidavit or discovery. Mallinckrodt has simply filed a motion to dismiss plaintiffs' petition.

Mallinckrodt, in effect, is seeking an advisory opinion before pleading or proving compliance. Plaintiffs, nevertheless, address Mallinckrodt's arguments as if Mallinckrodt's compliance existed. We address the arguments as presented, rather than avoiding the preemption issues on a procedural defect.[6]

---

[6] Mallinckrodt appears to tacitly admit plaintiffs may state a claim for relief if Mallinckrodt's noncompliance were pleaded. Plaintiffs do allege Mallinckrodt's noncompliance with certain federal regulations but these regulations do not set or affect emission standards.

IRRECONCILABLE CONFLICT

Permitting plaintiffs' petition to state a claim for relief under Missouri law, Mallinckrodt argues, would create an irreconcilable conflict between Missouri and federal standards. Mallinckrodt contends that subjecting it to state tort liability effectively establishes a "zero-release standard." More specifically, Mallinckrodt argues, that if a permissible release is to be determined by a jury "after the fact on an ad hoc basis," a federal licensee, like Mallinckrodt, "could assure avoidance of liability only by a zero release of emissions." This state imposed standard, Mallinckrodt reasons, irreconcilably conflicts with federal standards.

Mallinckrodt's logic is questionable. More important, its conclusion is not persuasive. As other manufacturers, producers and operators functioning in a regulated field, Mallinckrodt is not guaranteed absolute insulation from the consequences of its acts through compliance with federal regulation. *See McKay v. United States*, 703 F.2d 464, 470 (10th Cir. 1983) and *Silkwood v. Kerr-McGee Corp.*, 485 F. Supp. 566, 578-79 (W.D. Okla. 1979) and cases cited therein. Thus, the issue here is not whether Mallinckrodt will be assured of freedom from liability. Rather, the issue is whether there is an irreconcilable conflict between our state standards and federal standards; an issue which, in turn, is answered by whether it is impossible for Mallinckrodt to comply with both federal standards and those standards implicitly reflected in plaintiffs' petition. *Silkwood*, 104 S. Ct. at 626.

As noted, we are at the pleading stage with only plaintiffs' petition before us. Mallinckrodt has not shown our state standards to be more stringent than federal standards, nor has it shown our state standards to be theoretically or practically impossible to meet, if our state standards are in fact more stringent. Moreover, even if Mallinckrodt cannot reduce its radiation emissions below the federal standards, Missouri can decide that, as between Mallinckrodt and plaintiffs, Mallinckrodt ought to bear the costs of compensating those injuries that could have been prevented with a theoretical emission rate lower than the rate approved by the NRC. *See Ferebee v.*

Chevron Chemical Co., 736 F.2d 1529, 1540-41 (D.C. Cir.), cert. denied, ____U.S.____, 105 S. Ct. 545, 83 L. Ed.2d 432 (1984). On the present record, payment of damages and compliance with federal standards are clearly possible. Mallinckrodt can continue to meet federal standards, and, if found wanting by state standards, simply pay the piper.

Arguably, imposing damages for state torts committed by parties operating under federal standards has a possible state regulatory effect on the federal standards. A possible regulatory effect on federal standards by state tort actions, however, has long been accepted. *See, e.g., Cipollone*, 593 F. Supp. at 1155-56. Congress' acceptance of this possibility in the nuclear energy field was specifically noted by the Supreme Court in *Silkwood v. Kerr-McGee*, 104 S. Ct. at 625:

> No doubt there is tension between the conclusion that safety regulation is the exclusive concern of the federal law and the conclusion that a state may nevertheless award damages based on its own law of liability. But as we understand what was done over the years in the legislation concerning nuclear energy, Congress intended to stand by both concepts and to tolerate whatever tension there was between them. We can do no less. It may be that the award of damages based on the state law of negligence or strict liability is regulatory in the sense that a nuclear plant will be threatened with damages liability if it does not conform to state standards, but that regulatory consequence was something that Congress was quite willing to accept.

In short, common law liability does not impose requirements on Mallinckrodt; rather, it allows Mallinckrodt to choose between risking liability by not changing its behavior or attempting to negate the risk by lowering its emission rates. *Cipollone*, 593 F. Supp. at 1167. This reasoning may appear to be disingenuous and smack of sophistry; if so, the charge must be made against the entire judiciary for the reasoning has been continually used to justify the imposition of state tort liability as

a "complement to" federal standards. *See Silkwood*, 104 S. Ct. at 629-30 (Blackmun, J., dissenting); *Ferebee*, 736 F.2d at 1541; *Cipollone*, 593 F. Supp. at 1167, and cases collected therein.

FRUSTRATION OF FEDERAL OBJECTIVES

Mallinckrodt also argues that to permit recovery here would frustrate the objectives of federal law. The purpose of the Atomic Energy Act, Mallinckrodt points out, is to promote private nuclear development. If federal licensees like Mallinckrodt are subjected to claims even if in compliance with federal standards, then, Mallinckrodt reasons, the purpose of the Act would be frustrated by permitting state law to regulate federal licensees and discourage private industry.

As just noted, the Supreme Court addressed this specific issue in *Silkwood v. Keer-McGee*. Tort recovery to injured plaintiffs may create a tension between state law and federal law, but Congress was willing to accept this consequence. *Silkwood*, 104 S. Ct. at 625. The fact that some plaintiffs may be successful in recovering compensation from Mallinckrodt for injuries suffered does not mean that the state is setting its own emission levels. *Silkwood*, 104 S. Ct. at 626.

Moreover, if plaintiffs' recovery in tort merely inconveniences Mallinckrodt or makes its operation more costly, there is no frustration of federal policy or purpose. *See, e.g., Marshall v. Consumers Power Co.*, 65 Mich. App. 237, 237 N.W.2d 266, 281-82 (1975). State tort actions may frustrate federal objectives if the federal regulatory statutes have as an objective the affirmative subsidization of the regulated industry and if the statutes, explicitly or implicitly, command states to accept the use of the regulated product. *Ferebee*, 736 F.2d at 1542-43. The Atomic Energy Act, however, does not subsidize the nuclear industry. One of the purposes of the Atomic Energy Act may be to promote the peaceful development of nuclear energy, but the Act does not subsidize the nuclear industry to such an extent that states are commanded to use or accept the

use of nuclear energy. *See, e.g., Pacific Gas*, 461 U.S. at 205, 103 S. Ct. at 1722. States do have some control over the extent of use of nuclear materials within their boundaries as well as determining where and whether such use will occur. *See, e.g., State ex rel. Utility Consumers Council*, 562 S.W.2d at 698. They are not always required to tolerate actions permissible under federal law, *see, e.g., Pacific Gas*, 461 U.S. at 216, 222-23, 103 S. Ct. at 1728, 1731-32; *Ferebee*, 736 F.2d at 1543, and this is one such area.

Furthermore, radiation emission standards lower than federal emission standards are consistent with the federal aim of achieving radiation emissions as low as reasonably possible. *See* 10 C.F.R. § 20.1(c). The NRC has established emission standards designed to protect the public and, at the same time, allow for further development of nuclear energy using current technology. 10 C.F.R. § 20.1(c), 10 C.F.R. § 20.105-.106; 42 U.S.C. § 2201(b). These standards reflect an administrative decision—an administrative balancing of overall societal risks against societal benefits. *Silkwood*, 485 F. Supp. at 581-82; *Crowther v. Seaborg*, 312 F. Supp. 1205, 1231 (D. Colo. 1970); Keyes & Howarth, *Approaches to Liability for Remote Causes: The Low-Level Radiation Example*, 56 Iowa L. Rev. 531, 541, 568 (1971). Emission standards adequate for administrative purposes in meeting governmental goals, however, are not necessarily adequate for purposes of state tort law encompassing broader compensatory goals. These administrative emission standards are not absolute safety levels below which no injury can occur. *Silkwood*, 485 F. Supp. at 579-81; Keyes & Howarth, *supra*, at 545. As a result, insofar as state law is concerned, they are merely guidelines.

This conclusion is reflected in the prefatory language of 10 C.F.R. § 20. In various subsections, § 20 sets out the emission standards for NRC licensees. Preceding these subsections, the Purpose Clause of § 20 states:

> "In accordance with recommendations of the Federal Radiation Council, . . . [licensees] should, in addition to complying with the requirements set forth in this part, make every reasonable effort to maintain

> radiation exposures, . . . as low as is reasonably achievable." 10 C.F.R § 20.1(c).

This language clearly implies the federal standards are, at best, guidelines to state tort law. "In addition to complying with" the federal standards, licensees are requested to make every reasonable effort to achieve emissions as low as is reasonably achievable. Compliance with federal standards is mandatory; the request to achieve emission rates lower than these standards, however, implicitly acknowledges these lower rates may, in fact, be achieved. Moreover, the determination of the reasonableness of the effort to achieve these lower rates is not exclusively arrogated by the NRC. Sensibly, this implies state tort law can determine whether reasonable efforts have been made, and, thus, complement the NRC standards. This implication is reinforced by the industrial and commercial use of nuclear energy still being at the cutting edge of science. Scientific data affecting reasonable emission standards change often and rapidly. *See Silkwood*, 485 F. Supp. at 581; Keyes & Howarth, *supra*, at 540. Thus, even though NRC emission standards may be based upon the best scientific data available at the time they are promulgated, these standards necessarily lag behind the change in scientific data. Keyes & Howarth, *supra*, at 540. To accept Mallinckrodt's reasoning would leave parties injured by radioactive emissions without recourse when science or technology has improved to permit levels of emissions lower than those currently established by the NRC.

This was not Congress' intent. States may be preempted from setting their own emission standards, but they are not preempted from compensating injured citizens. *See Silkwood*, 104 S. Ct. at 625-26. "Congress . . . disclaimed any interest in promoting the development and utilization of atomic energy by means that fail to provide adequate remedies for those who are injured by exposure to hazardous nuclear materials." *Silkwood*, 104 S. Ct. at 626.

INCIDENT/ACCIDENT

Mallinckrodt also argues that if any state tort claims survive preemption, the only permissible ones are those arising out of a "nuclear incident." Relying on the facts of *Silkwood* selected language from that case as well as selected passages from the legislative history of the Price-Anderson Act Mallinckrodt defines "nuclear incident" as "an accidental release of radiation in excess of federal limits." Mallinckrodt then argues releases in compliance with federal regulations cannot constitute accidents or "nuclear incidents" and, therefore, claims, like plaintiffs, seeking recovery for alleged injuries resulting from "planned, federally permissible releases" must be preempted. We read *Silkwood* as well as the legislative history differently.

Mallinckrodt views *Silkwood* as dealing with three separate incidents of contamination of Karen Silkwood away from Kerr-McGee's plant. These three events are in turn viewed as constituting something out of the ordinary—a "nuclear incident." Mallinckrodt also seizes on "nuclear incident" being used interchangeably with "nuclear accident" by various courts, including the Supreme Court in *Silkwood*, to show the latter term necessarily defines the former. *See, e.g., Silkwood*, 104 S. Ct. at 623, 625.

Mallinckrodt's logic is flawed. If "nuclear incident" is a term of art, its definition is found in 42 U.S.C. § 2014(q), which, as noted, defines "nuclear incident" to mean "any occurrence . . . causing . . . bodily injury, sickness, disease, or death. . . ." The courts' use of "incident" interchangeably with "accident" to describe or refer to the particular facts before them does not circumscribe the broad generic definition. Courts also use the term "hazard" and "occurrence" interchangeably with the term "incident." *See, e.g., Silkwood*, 104 S. Ct. at 624, 626. Obviously, the generic term "occurrence" includes the more limited defined term "accident." Applying Mallinckrodt's reasoning to these interchanged references means the term "incident" could also be equated with "hazard" or "occurrence." No sensible argument can be made that any emission or exposure is not an occurrence or does not entail some hazard.

This same argument was summarily dealt with in *Van Dissel v. Jersey Central Power & Light Co.*, 194 N.J. Super. 108, 476 A.2d 310, *cert. denied*, 99 N.J. 186, 491 A.2d 690 (1984). Upon remand by the United States Supreme Court for further consideration in light of *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 104 S. Ct. 615, 78 L. Ed.2d 443 (1984), the New Jersey Superior Court found no preemption of claims for property damage resulting from the normal operation of a nearby nuclear power reactor plant. In reaching its decision, the New Jersey Court concluded, as we conclude here, that compensable injuries do not have to be caused by "nuclear accidents." 476 A.2d at 316. *See also McKay v. United States*, 703 F.2d at 465.

We have also carefully read the selections of congressional debates and reports cited by Mallinckrodt in support of its position. We remain unpersuaded. The examples of "typical" nuclear incidents Mallinckrodt selects from the legislative history are examples of incidents but are not necessarily typical. One of Congress' concerns in enacting the Price-Anderson Act and its subsequent amendments was to protect the public by assuring the availability of funds for claims arising out of major nuclear incidents. *See, e.g.*, S. Rep. 454, 94th Cong., 1st Sess. (1975), U.S. Code Cong. & Admin. News 1975, p. 2251; H.R. Rep. No. 2043, 89th Cong., 2d Sess. (1966). Most, if not all, of Mallinckrodt's cited examples address this concern and, thus, are examples of major or catastrophic incidents.[7] This does not mean that emissions or exposures less than federal limits are preempted or are not included under the Price-Anderson indemnification system. Standard insurance was assumed to cover minor incidents, and, for these, the nuclear industry would not need federal assistance. *See, e.g.*, H.R. Rep. No. 2043, 89th Cong., 2d Sess. 11 (1966). Consequently, in the hearings, reports and debates cited by Mallinckrodt, the precise

---

[7] *See, e.g., Proposed Amendments to Price-Anderson Act Relating to Waiver of Defenses: Hearings before the Joint Committee on Atomic Energy*, 89th Cong., 2d Sess. 47 (1966) (statement of Joseph Hennessey, AEC General Counsel); S. Rep. No. 454, *reprinted in* 1975 U.S. Code Cong. & Ad. News 2251; H.R. Rep. No. 1115, 93d Cong., 2d Sess. 7 (1974). *See also* H.R. Rep. No. 2043, 89th Cong., 2d Sess. 9-11 (1966).

definition of a nuclear incident, especially in relation to minor incidents, was not a concern.

If plaintiffs' claims must be confined to "nuclear incidents" as defined in federal statutes, plaintiffs' claims are properly pleaded. The term nuclear incident means:

> "any occurrence, . . . causing, . . . bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive, . . . properties of source, special nuclear, or byproduct material . . . ." 42 U.S.C. § 2014(q).

This definition is "designed to protect the public against any form of damage arising from the special dangerous properties of the materials used in the atomic energy program." S. Rep. No. 296, 1957 U.S. Code Cong. & Ad. News 1817. Moreover, an incident does not necessarily have to occur within a short period of time, and steady exposure to radiation, perhaps, from an undetected leak of radioactive materials, can constitute an incident. *Id.* We also note 42 U.S.C. § 2014(q) itself does not require an accidental or unplanned release. *See also McKay v. United States*, 703 F.2d 464 (10th Cir. 1983).

In summary, the legislative history of the Price-Anderson Act and its amendments, as well as case law, consistently reflect the underlying principle of interfering with state law to the minimum extent necessary. *E.g.*, S. Rep. No. 1605, 1966 U.S. Code Cong. & Ad. News 3206. Consequently, the rights of a party injured by radiation are for the most part left to state law. S. Rep. No. 296, 1957 U.S. Code Cong. & Ad. News 1810. While we may be attracted by the logic of some of Mallinckrodt's arguments supporting preemption, our understanding of *Silkwood* is that its reach is greater and much more inclusive than the limits Mallinckrodt would place on it. We are constrained to follow not only the holding of *Silkwood* but also to follow our understanding of its teaching.

POLITICAL QUESTION DOCTRINE

The political question doctrine establishes a limitation on the authority of the judiciary to resolve issues, decidedly political in nature, that are properly left to the legislature. If a case actually involves the resolution of a political question, the matter is immune from judicial review. There should, however, be no dismissal for nonjusticability on the basis of a political question's presence unless

> "[p]rominent on the surface of any case held to involve a political question [there] is found a textually demonstrable constitutional commitment of the issue to a coordinate political department; or a lack of judicially discoverable and manageable standards for resolving it; or the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government; or an unusual need for unquestioning adherence to a political decision already made; or the potentiality of embarrassment from multifarious pronouncements by various departments on one question." *Baker v. Carr*, 369 U.S. 186, 217, 82 S. Ct. 691, 710, 7 L.Ed.2d 663 (1962).

The propriety of nuclear related activities is a political question properly committed to the legislative and executive branches of our government. Nonetheless, individual tort recoveries stemming from those activities normally are not precluded by the political question doctrine. *McKay*, 703 F.2d at 470. "If Congress had intended that some department or departments should have full and complete and exclusive authority in the area of obtaining redress for injuries, it certainly would have said so either in the legislative history or in the Act itself." *Id.* at 472.

Defendant relies on *Crowther* v. *Seaborg*, 312 F. Supp. 1205 (D. Colo. 1970) to assert plaintiffs' claim was barred by the political question doctrine. *Crowther* is distinguishable, however. The plaintiffs in *Crowther* were seeking an injunction

to stop testing involving nuclear detonations and a determination that the applicable radiation safety standards were inadequate. The court in *Crowther* rightly held that the extent and nature of government participation in the development of energy sources was a political question as was the establishment of radiation protection standards. 312 F. Supp. at 1231-32. Plaintiffs in this case, however, are not trying to establish standards that conflict with legislative determinations; they are seeking compensation for injuries. Nor does the allowing of recovery for those injuries which do occur mean the state is creating new standards; rather, the state is protecting its citizens by making defendant responsible for injuries arising from its activities as a cost of doing business.

FAILURE TO STATE A CLAIM

Plaintiffs plead their three theories of liability in three separate Counts: Count I—negligence, Count II—assault and battery, Count III—strict liability. Although stated somewhat differently in two of the three Counts, plaintiffs allege their injuries result from Mallinckrodt's radioactive emissions which have or will cause (1) "various health and physical illnesses" and "injury, damages to health, property and safety of plaintiffs," (2) "a drastic increase in the class of many physical illnesses," such as "leukemia, cancer and nervous disorders," and (3) "apprehension ... [because of] severe psychotic trauma" from the exposure and increased risk of illness.[8]

Focusing on these allegations of damages, Mallinckrodt argues that plaintiffs have failed to state a claim because they do not "specifically allege any particular individual has sustained an identifiable and detectable physical injury." We disagree.

---

[8] These injuries are alleged by plaintiffs in Count I. In Count II, plaintiffs allege the "radiation striking" them has caused and will cause (1) "various health problems ... as well as apprehension and fear" and (2) "permanent and irreparable physical and mental injuries as well as mental anguish and damages." In Count III, they allege their damages are the same "as hereinabove stated."

Injury is an essential element of a tort based on negligence. *E.g., Chubb Group of Ins. Cos. v. C.F. Murphy & Assocs., Inc.*, 656 S.W.2d 766, 774 (Mo. App. 1983); *See also* W. Prosser, *Law of Torts* § 30, at 143 (4th ed. 1971). It also is an essential element of a tort based on strict liability. *E.g.*, Restatement (Second) of Torts § 519 (1977). Thus, unless plaintiffs properly plead their injuries in their negligence and strict liability claims, they have failed to state a claim upon which relief can be granted.[9] *See, e.g., Dix v. Motor Market, Inc.*, 540 S.W.2d 927, 932 (Mo. App. 1976).

PLAINTIFFS' PLEADED INJURIES

(1) "Various health and physical illness" and "Injury, damages to health, property and safety to plaintiffs"

Technical forms of pleading are no longer required. Rule 55.04. To plead a claim for relief, the pleader must simply allege a "plain statement of the facts showing [he] is entitled to relief . . . ." Rule 55.05. Although the pleader need not allege evidentiary or operative facts, *e.g., Scheibel v. Hillis*, 531 S.W.2d 285, 290 (Mo. banc 1976), he must allege ultimate facts, *id.* at 290, and cannot rely on mere conclusions, *e.g., Commercial Bank of St. Louis County v. James*, 658 S.W.2d 17, 22 (Mo. banc 1983). These rules and their interpretations are much easier stated than applied. Many allegations simply do not fall within a precise definition of a fact. They are mixed statements of fact and conclusions. In Missouri, however, we still remain stuck in a semantic morass, attempting to differentiate fine and evanescent distinctions between evidentiary facts, ultimate facts and conclusions. *See, e.g., Einhaus v. Ames Co.*, 547 S.W.2d 821, 825 (Mo. App. 1976). To us, the distinction is really one between generality and particularity.

Admittedly, forceful argument can be made that plaintiffs' allegations of injury are vague and ambiguous. Mere vagueness, however, is not grounds for a motion to dismiss, *e.g.*,

---

[9] For an assault and battery, plaintiffs' Count II, "[t]he establishment of the technical cause of action, even without proof of any harm, entitles the plaintiff to vindication of his legal right by an award of nominal damages." W. Prosser, *Torts* § 10, at 38 (4th ed. 1971).

Pillow v. Gen. American Life Ins. Co., 564 S.W.2d 276, 279 (Mo. App. 1978), and we prefer to dispose of a case on its merits instead of on the pleadings, *see, e.g., Laclede Gas Co. v. Hampton Speedway Co.*, 520 S.W.2d 625, 631 (Mo. App. 1975). More important, a petition should be dismissed only if it appears the pleader can prove no set of facts in support of his claim for relief. *E.g., Gaines v. Monsanto Co.*, 655 S.W.2d 568, 570 (Mo. App. 1983); *Pillow*, 564 S.W.2d at 279-80.

The narrow issue here is whether plaintiffs' allegations of "various health and physical" illnesses or "injury" generally are ultimate facts or conclusions. Rational application of our basic pleading principles can be used to classify plaintiffs' allegation of injuries either as ultimate facts or conclusions. Rather than torture logic to reach a preconceived result, we focus on whether Mallinckrodt knows what this action involves. We think it does. If plaintiffs were pleading in the federal courts, their allegations of injuries would withstand a motion to dismiss. *Pearl v. Allied Corp.*, 566 F. Supp. 400, 403-04 (E.D. Penn. 1983). Mallinckrodt is no less informed simply by being sued in our state courts. Admittedly, there are differences between the so-called "notice pleading" in the federal court and our code pleading. The only relevant difference here, however, would be that plaintiffs' allegations of injuries in the federal courts not only would withstand a motion to dismiss but also would withstand a motion to make more definite and certain, *see, e.g.*, 2A *Moore's Fed. Practice*, §§ 12.08, 12.18 (2d ed. 1985), but, in our courts, these allegations would be and are subject to a motion to make more definite and certain.

Plaintiffs' pleadings are subject to a motion to make more definite and certain because they lack sufficient detail for Mallinckrodt to prepare a responsive pleading. Rule 55.27(d). Arguably, Mallinckrodt could answer by filing a general denial and use discovery to gain information for trial. But an important element of plaintiffs' claims is a medically diagnosable injury or illness. A clear diagnosis is essential for identifying the precise cause of the injury and identifying Mallinckrodt as the culprit. Thus, although the injuries as pled withstand the motion to dismiss, they are subject to make more definite and certain. Rule 55.27(d).

(2) "A drastic increase in the class of many physical illnesses" such as "leukemia, cancer and nervous disorders."

In the pleaded injuries just discussed, plaintiffs' claim present physical injuries. The question there was whether the language used was precise enough to state a claim. In this claim of injury, plaintiffs allege future injuries. Sensibly read, plaintiffs allege the exposure to radiation has increased their risk as candidates for cancer. The question here is whether plaintiffs may recover on the theory that their increased risk of contracting cancer is a present injury.

In Missouri, no different than most other jurisdictions, future damages in a personal injury action are not compensable unless reasonably certain to occur. *See, e.g., Hahn v. McDowell*, 349 S.W.2d 479, 482 (Mo. App. 1961). No Missouri Court, however, has been confronted with the precise issue here. Courts in other jurisdictions have. In resolving the issue, they quite logically determine whether the enhanced risk from exposure to a toxic substance, as pleaded or proved, is a reasonable certainty or can be considered a reasonable certainty. They find it is not. *See, e.g., Morrissy v. Eli Lilly & Co.*, 76 Ill. App.3d 753, 32 Ill. Dec. 30, 37, 394 N.E.2d 1369, 1376 (1979); *Ayers v. Township of Jackson*, 189 N.J. Super. 561, 461 A.2d 184, 187 (Law Div. 1983); *Askey v. Occidental Chemical Corp.*, 102 A.D.2d 130, 477 N.Y.S.2d 242, 247 (1984). *See also Laswell v. Brown*, 683 F.2d 261, 269 (8th Cir. 1982), *cert. denied*, 459 U.S. 1210, 103 S. Ct. 1205, 75 L.Ed.2d 446 (1983); *Mink v. University of Chicago*, 460 F. Supp. 713, 719 (N.D. Ill. 1978).

This resolution makes sense. Plaintiffs here, like the plaintiffs in the cited cases, base their claim on mathematical probabilities. Damages based on mere mathematical probabilities significantly undercompensate those who actually develop cancer and are a windfall to those who do not. No acceptable definition of justice would contemplate such a result. Consequently, this claim of injury is fatally defective.

(3) "Apprehension . . . [because of] severe psychic trauma from the exposure and increased risk of illness."

We have paraphrased this pleading of injury.[10] As we understand it, plaintiffs seek to recover for emotional distress allegedly suffered by them as a result of being exposed to radiation, and plaintiffs seek compensation for this emotional distress without a showing of physical injury. In short, plaintiffs seek compensation for fear of cancer—cancerphobia.

Plaintiffs allege their emotional distress is a direct result of Mallinckrodt's tortious conduct. Plaintiffs no longer need to allege a contemporaneous physical injury to plead a tort action for emotional distress. *See Bass v. Nooney Co.*, 646 S.W.2d 765, 772 (Mo. banc 1983); *Young v. Stensrude*, 664 S.W.2d 263, 265 (Mo. App. 1984). Plaintiffs need only to plead Mallinckrodt should have realized its conduct involved an unreasonable risk of causing plaintiffs' emotional distress and the distress is medically diagnosable and medically significant. *Bass v. Nooney*, 646 S.W.2d at 772-73.

We have read plaintiffs' petition carefully, giving it the most liberal interpretation. Our pleading principles may abolish the technicalities of pleading. They do not abolish the need for clear thinking and clarity. Plaintiffs do plead a "psychic

---

[10] More specifically, plaintiffs plead:

> "[they] have suffered apprehension and will continue in the future under severe psychic trauma as a result of their exposure to and the increased risk to the [noted] illnesses."

Obviously, plaintiffs have failed to include several grammatical articles necessary to give this pleading a precise meaning. No useful purpose is served, however, in making these additions a prerequisite to our consideration. We have paraphrased the pleading to reach the issue that would be raised by an appropriate amendment.

trauma," which is medically diagnosable and can be medically significant.[11] Plaintiffs, however, do not plead Mallinckrodt should have realized its alleged conduct involved an unreasonable risk of causing this psychic trauma. Thus, plaintiffs have not met the minimal requirements of *Bass v. Nooney, supra,* and, as now pleaded, this claim is fatally defective.

We do not address nor intend to comment on the extent of plaintiffs' possible problems in properly pleading forseeability here, to say nothing of the complex and formidable problems of proof this pleading entails. *See generally* G. Nothstein, *Toxic Torts* § 16.05-.11 (1984).

STRICT LIABILITY

Plaintiffs last Count sounds in strict liability for "ultrahazardous" activities. Restatement of Torts § 519 (1938) creates a claim in strict liability for damages caused by an "ultrahazardous activity." Restatement (Second) of Torts § 519 (1977), however, replaces the term "ultrahazardous" with the term "abnormally dangerous." Our research has not uncovered any Missouri case which expressly accepts or adopts either version of § 519. Nonetheless, we believe strict liability, as defined by the Restatement (Second) of Torts, should be adopted and applied to claims based on radiation damage, and, under this definition, we find plaintiffs have pleaded a claim for relief in strict liability.[12]

---

[11] Psychic trauma is defined as:

> "an upsetting experience precipitating or aggravating an emotional or mental disorder." *Stedman's Medical Dictionary* 1476 (24th ed. 1982); or "An emotional injury or shock that leaves a lasting impression on the conscious or subconscious mind. It may cause a permanent change in the personality of the patient." 3 *Schmidt's Attorneys' Dictionary of Medicine* P-302 (1984).

[12] As used in the Restatement, the terms "ultrahazardous" and "abnormally dangerous" are terms of art. Each has a separate and distinct definition, but these definitions overlap and are not mutually exclusive. Compare Restatement of Torts § 520 (1938) with Restatement (Second) of Torts § 520 (1977).

No useful purpose is served in affirming the dismissal because plaintiffs used "ultrahazardous" rather than "abnormally dangerous," simply to have plaintiffs replead this claim using the latter and proper term.

The doctrine of strict liability stems from the English case, *Rylands v. Fletcher*, 1 L.R.-Ex. 265 (1866), *aff'd*, 3 L.R.-E. & I. App. 330 (1868). The lower court, the Exchequer Chamber, stated the "true rule" of law to be: "the person who for his own purposes brings on his land and collects and keeps there anything likely to do mischief if it escapes, must keep it at his peril, and if he does not do so is prima facie answereable for all the damage which is the natural consequence of its escape." *Fletcher v. Rylands*, 1 L.R.-Ex. 265, 279-80 (1866). The House of Lords limited the "rule" by making it applicable only to non-natural uses of land. *Rylands v. Fletcher*, 3 L.R.-E. & I App. 330, 338 (1868). See also Prosser, *Law of Torts* § 78, at 505-06 (4th ed. 1971).

As Prosser explains, the "true rule" of *Rylands v. Fletcher* is the limited rule. It makes the defendant liable "when he damages another by a thing or activity unduly dangerous and inappropriate to the place where it is maintained, in the light of the character of that place and its surroundings." *Id.* at 508. Sections 519 and 520, Restatement (Second) of Torts (1977), reflect this principle, with § 520 listing six factors pertinent in determining whether an activity is abnormally dangerous.[13]

In Missouri, we have expressly rejected the rule of the Exchequer Chamber, i.e., a defendant is strictly liable when anything under his control escapes and does damage. *See, e.g., Kelley v. National Lead Co.*, 240 Mo. App. 47, 210 S.W.2d 728, 733 (1948); *Greene v. Spinning*, 48 S.W.2d 51, 61 (Mo. App. 1931). Thus, in Missouri, as in many other jurisdictions, the

---

[13] These six factors are:

(a) existence of a high degree of risk of some harm to the person, land or chattels of others;

(b) likelihood that the harm that results from it will be great;

(c) inability to eliminate the risk by the exercise of reasonable care;

(d) extent to which the activity is not a matter of common usage;

(e) inappropriateness of the activity to the place where it is carried on; and

(f) extent to which its value to the community is outweighed by its dangerous attributes.

"true rule" of *Rylands v. Fletcher* has been misstated and, as misstated, has been almost totally rejected, "most often on facts which had no proper application in the first place." Prosser, *supra*, at 508-09.

Be that as it may, the "rule of *Rylands v. Fletcher*" is very narrowly applied in Missouri. In blasting cases, for example, a claim for strict liability is as valid a claim as a claim based upon nuisance or trespass. *Summers v. Tavern Rock Sand Co.*, 315 S.W.2d 201 (Mo. 1958); *Carson v. Blodgett Const. Co.*, 189 Mo. App. 120, 174 S.W. 447 (1915) (strict liability); *Blackford v. Heman Const. Co.*, 132 Mo. App. 157, 112 S.W. 287 (1908) (nuisance); *Johnson v. Kansas City Terminal Ry. Co.*, 182 Mo. App. 349, 170 S.W. 456 (1914); *Faust v. Pope*, 132 Mo. App. 287, 111 S.W. 878 (1908) (trespass). But our courts go no further. In other cases, in which plaintiff alleged his damage was caused by an "ultrahazardous" or "abnormally dangerous" thing or activity, our courts have rejected claims based upon strict liability and required the claim to be brought in negligence, nuisance or trespass. *See generally* II Mo. Tort Law, Chap. 32, *Strict Tort Liability* (Mo. Bar CLE 1980); Comment, *The Rylands v. Fletcher Doctrine and Its Standing In Missouri*, 18 Mo. L. Rev. 53 (1953).

Arguably, this history demonstrates a refusal to extend the use of strict liability as a legal tool to hold liable for damages those engaged in abnormally dangerous activities. If this is true, the question here is not would, but rather should, a nuclear plant operator be held strictly liable for his actions? This question is not answered by the usually salutary aphorism—if it ain't broke, don't fix it. Theories of liability other than strict liability may serve society better in resolving issues between parties when normal danger is involved. These theories are not equally effective in the nuclear industry.

Understandably, a record was not made for the purpose of determining whether, strict liability, as defined by the Restatement, should be applied here. Certain facts, however, are common knowledge or part of the present record.

The nuclear industry is unique in its inherent and, at present, unrectifiable danger. It is regulated by the federal

government. Numerous safety standards have been set to ensure the public welfare, but even with these precautions taken, the potential danger is still enormous. Moreover, as previously noted, the safety standards are not guarantees of absolute safety. Federal emission standards are only guidelines which are based upon an inherently inexact balancing of human and environmental risks against social benefits. *See Silkwood*, 485 F. Supp. at 581-82; Keyes & Howarth, *supra*, at 541, 568. *See also* 10 C.F.R. § 20.1(c). Each licensee is therefore requested to make every reasonable effort to maintain radiation exposures and releases as low as reasonably achievable. 10 C.F.R. § 20.1(c). The value of the nuclear industry to society may be great, but the use of nuclear material is not yet so common that strict liability should not be applied at this time.[14] This is the basis for the Restatement and Prosser recognizing the nuclear industry is particularly suited for the application of strict liability. *See* Restatement (Second) of Torts § 520, comments g, h (1977); Prosser, *supra*, § 78, at 516. In short, the nuclear industry creates dangers as great as blasting operations, if not more so, and, thus, if it fits the criteria established for strict liability, it should be governed by those legal liabilities imposed upon blasting operations because of its danger.

Our Courts have not been deterred in the past from adopting Restatement principles of tort deemed sensible and necessary.[15] We should not be deterred here. Plaintiffs have alleged that Mallinckrodt's activities have created a high degree

---

[14] Nuclear reactors may never be considered a natural use of the land. On the other hand, nuclear reactors may follow the same path as the "aeroplane," and technological advances and widespread use may make strict liability inapplicable to the nuclear industry as it now is to the use of aeroplanes. *See* Prosser, *supra*, § 78, at 514-15.

[15] *See Blevins v. Cushman Motors*, 551 S.W.2d 602 (Mo. banc 1977) (products liability—Restatement (Second) of Torts § 402A); *Pretsky v. Southwestern Bell Telephone Co.*, 396 S.W.2d 566, 568-69 (Mo. 1965) (intentional infliction of emotional harm—Restatement (Second) of Torts § 48); *Porter v. Crawford & Co.*, 611 S.W.2d 265 (Mo. App. 1980) (prima facie tort—Restatement (Second) of Torts § 870); *Annbar Associates v. American Express Co.*, 565 S.W.2d 701 (Mo. App. 1978) (injurious falsehood—Restatement (Second) of Torts § 623A *et seq.*).

of risk of harm, the harm has been and will be significant, the risk cannot be eliminated, the harm outweighs the value of the operation of the plant and they have suffered injuries. These are the factors to be considered in a claim for strict liability. Restatment (Second) of Torts §§ 519 and 520 (1977).

The Restatement (Second) of Torts § 519 (1977) speaks of "abnormally dangerous activities," and § 520 lists pertinent factors to determine the appropriateness of the activity in question. The Restatement suggests the court should balance the risks against the benefits and determine, as a matter of law, whether the benefits outweigh the risks. This determination is no different than the determination made by the court when it determines the reasonableness of the use of the land in nuisance cases. *See, e.g., Clinic & Hospital, Inc. v. McConnell*, 236 S.W.2d 384, 391 (Mo. App. 1951).[16] On remand, the trial court should develop the appropriate record for its determination whether strict liability, as defined by Restatement (Second) of Torts § 520 (1977), should be applied here.[17]

---

[16] "What is a reasonable use of one's property and whether a particular use is an unreasonable invasion of another's use and enjoyment of his property cannot be determined by exact rules, but must necessarily depend upon the circumstances of each case, such as locality and the character of the surroundings, the nature, utility and social value of the use, the extent and nature of the harm involved, the nature, utility and social value of the use or enjoyment invaded, and the like." 236 S.W.2d at 391.

[17] The factors listed by the Restatement are, as their designation implies, simply factors to be considered by the court. They are not elements of a claim for relief. Restatement, *supra*, § 520. Forceful argument can be made that factor (f) of § 520—social risk weighed against social benefit—has been predetermined by the federal government licensing Mallinckrodt's operations, if the operations are in fact licensed.

INJUNCTIVE RELIEF

In addition to monetary damages, plaintiffs also seek to enjoin Mallinckrodt's operations. The propriety of this request was not raised as an issue before us. It is clear, however, plaintiffs are not entitled to this injunctive relief. Enjoining Mallinckrodt's operations would effectively establish a state standard, and, as a result, would frustrate federal law. *See, e.g., Pennsylvania v. General Public Utilities Corp.*, 710 F.2d 117, 120 (3d Cir. 1983); *Crowther v. Seaborg*, 312 F. Supp. at 1235.

Judgment reversed. Cause remanded.

HAROLD L. SATZ

Harold L. Satz, Judge

ROBERT O. SNYDER — *Concurs*

Robert O. Snyder, Presiding Judge

JAMES A. PUDLOWSKI — *Concurs*

James A. Pudlowski, Judge

IN THE

Missouri Court of Appeals

Eastern District

DIVISION ONE

SAMUEL F. BENNETT, *et al.*
Plaintiffs-Appellants,

vs.

MALLINCKRODT, INC.
Defendant-Respondent.

No. 47771

Appeal from the Circuit Court of St. Louis County

Opinion Filed:
September 26, 1985

ON MOTIONS FOR REHEARING OR, IN THE ALTERNATIVE, FOR TRANSFER TO THE SUPREME COURT

PER CURIAM

In its motion for rehearing, Mallinckrodt points out that we did not address one of its contentions raised on appeal. This contention centers on statements made by plaintiffs' counsel during oral argument on Mallinckrodt's motion to dismiss. Mallinckrodt asserts these statements clarify and control the meaning of plaintiffs' petition. We were aware of this contention. We read those cases cited by Mallinckrodt in support of its contention and found them to be inapposite. In addition, we note counsel's "clarifying" statements are not part of the designated record but are merely part of an apparent excerpt from the motion hearing appended to Mallinckrodt's brief. On

the present facts, we know of no principle of law or logic which requires us to define the explicit meaning of plaintiffs' allegations by the fractional extemporaneous remarks of plaintiffs' counsel. As we noted in our opinion, Mallinckrodt's concern can be alleviated by a motion to make plaintiffs' allegations more definite and certain.

Also, Mallinckrodt once again attempts to support some of its arguments by information which is not part of the record. Once again we note this case is before us only on the trial court's grant of Mallinckrodt's motion to dismiss plaintiffs' petition. If Mallinckrodt wishes to support its arguments by a "Brandeis Brief," it has the proper procedural devices to do so.

Finally, to allay Mallinckrodt's new concern generated by its reading of our opinion, we note that we were and are aware of the difference in potential danger between a reactor meltdown and a radioactive isotope. The present record, however, does not intimate, much less disclose, the potential danger of Mallinckrodt's operation. Our opinion remains unchanged. Strict liability is an appropriate principle for activities generating radioactive emissions. It is for Mallinckrodt to demonstrate to the trial court that its particular activities do not fall within the purview of strict liability as defined by Restatement (Second) of Torts § 520 (1977).

Motions for rehearing and for Transfer to the Supreme Court denied.

APPENDIX B

No. 67532

ED 47771

IN THE
SUPREME COURT OF MISSOURI

September Session 1985

SAMUEL F. BENNETT *et al.*,
Plaintiffs-Appellants,

vs.

TRANSFER
MALLINCKRODT, INC.,
Defendant-Respondent.

Now at this day, on consideration of Defendant-Respondent's Application to transfer the above entitled cause from the Eastern District Court of Appeals, it is ordered that said application be, and the same is hereby denied.

STATE OF MISSOURI—SCT.

I, THOMAS F. SIMON, Clerk of the Supreme Court of the State of Missouri, certify that the foregoing is a full, true and complete transcript of the judgment of said Supreme Court, entered of record at the September Session thereof, 1985, and on the 21st day of November 1985, in the above entitled cause.

Given under my hand and seal of said Court, at the City of Jefferson City, this 21st day of November, 1985.

THOMAS F. SIMON

_____ *Clerk.*

_____ *D.C.*

APPENDIX C

IN THE
CIRCUIT COURT
COUNTY OF ST. LOUIS, MISSOURI

August 18, 1983

SAMUEL F. BENNETT, *et al.*
vs.
Number 484711
Division 4
MALLINCKRODT, INC.

This matter is before the Court on Defendant's Motion to Dismiss Plaintiffs' Petition, the same having been presented, heard, ably argued and capably briefed.

The Court, being now sufficiently advised of and having considered the premises, adjudges that the Court does not have subject matter jurisdiction and Plaintiffs' Petition fails to state a claim upon which relief can be granted. Defendant's Motion to Dismiss Plaintiffs' Petition is SUSTAINED.

The August 19, 1983 setting for hearings on various motions is vacated, such motions now being moot. Costs are assessed against Plaintiffs.

cc: Brown, James & Rabbitt, P.C.
Whaley & McAuliffe

Peper, Martin, Jensen, Maichel & Hetlage
Covington & Burling

SO ORDERED

B. C. DRUMM, JR.

B. C. Drumm, Jr., Judge

APPENDIX D

The Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2011 *et seq.*, provides in relevant part:

42 U.S.C. § 2013:

> It is the purpose of this Act to effectuate the policies set forth above by providing for—
>
> * * *
>
> (d) a program to encourage widespread participation in the development and utilization of atomic energy for peaceful purposes to the maximum extent consistent with the common defense and security and with the health and safety of the public;
>
> * * * *

42 U.S.C. § 2014(e):

> The term "byproduct material" means any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material.

42 U.S.C. § 2111:

> No person may transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, own, possess, import, or export any byproduct material, except to the extent authorized by this section or by section 82 [42 U.S.C. § 2112]. The Commission is authorized to issue general or specific licenses to applicants seeking to use byproduct material for research or development purposes, for medical therapy, industrial uses, agricultural uses, or such other useful applications as may be developed. The Commission may distribute, sell, loan, or lease such byproduct material as it owns to qualified applicants with or without charge: Provided, however, That, for byproduct material to be distributed by the Commission for a charge, the Commission shall establish prices on such equitable basis as, in the opinion of the Commission, (a) will provide reasonable com-

pensation to the Government for such material, (b) will not discourage the use of such material or the development of sources of supply of such material independent of the Commission, and (c) will encourage research and development. In distributing such material, the Commission shall give preference to applicants proposing to use such material either in the conduct of research and development or in medical therapy. The Commission shall not permit the distribution of any byproduct material to any licensee, and shall recall or order the recall of any distributed material from any licensee, who is not equipped to observe or who fails to observe such safety standards to protect health as may be established by the Commission or who uses such material in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor or approved by the Commission. The Commission is authorized to establish classes of byproduct material and to exempt certain classes or quantities of material or kinds of uses or users from the requirements for a license set forth in this section when it makes a finding that the exemption of such classes or quantities of such material or such kinds of uses or users will not constitute an unreasonable risk to the common defense and security and to the health and safety of the public.

42 U.S.C. § 2282(a):

(a) Any person who (1) violates any licensing provision of section 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 [42 U.S.C. §§ 2073, 2077, 2092, 2093, 2111, 2112, 2131, 2133, 2134, 2137, 2139] or any rule, regulation, or order issued thereunder, or any term, condition, or limitation of any license issued thereunder, or (2) commits any violation for which a license may be revoked under section 186 [42 U.S.C. § 2236], shall be subject to a civil penalty, to be imposed by the Commission, of not to exceed $100,000 for each such violation.

APPENDIX E

The U.S. Nuclear Regulatory Commission has promulgated regulations that establish limitations on permissible exposures to radiation for the general public. These regulations provide in relevant part:

10 C.F.R. § 20.105:

> (a) There may be included in any application for a license or for amendment of a license proposed limits upon levels of radiation in unrestricted areas resulting from the applicant's possession or use of radioactive material and other sources of radiation. Such applications should include information as to anticipated average radiation levels and anticipated occupancy times for each unrestricted area involved. The Commission will approve the proposed limits if the applicant demonstrates that the proposed limits are not likely to cause any individual to receive a dose to the whole body in any period of one calendar year in excess of 0.5 rem.
>
> (b) Except as authorized by the Commission pursuant to paragraph (a) of this section, no licensee shall possess, use or transfer licensed material in such a manner as to create in any unrestricted area from radioactive material and other sources of radiation in his possession:
>
> > (1) Radiation levels which, if an individual were continuously present in the area, could result in his receiving a dose in excess of two millirems in any one hour, or
> >
> > (2) Radiation levels which, if an individual were continuously present in the area, could result in his receiving a dose in excess of 100 millirems in any seven consecutive days.

(c) In addition to other requirements of this part, licensees engaged in uranium fuel cycle operations subject to the provisions of 40 CFR Part 190, "Environmental Radiation Protection Standards for Nuclear Power Operations," shall comply with that part.

10 C.F.R. § 20.106:

(a) A licensee shall not possess, use, or transfer licensed material so as to release to an unrestricted area radioactive material in concentrations which exceed the limits specified in Appendix B, Table II of this part, except as authorized pursuant to § 20.302 or paragraph (b) of this section. For purposes of this section concentrations may be averaged over a period not greater than one year.

(b) An application for a license or amendment may include proposed limits higher than those specified in paragraph (a) of this section. The Commission will approve the proposed limits if the applicant demonstrates:

(1) That the applicant has made a reasonable effort to minimize the radioactivity contained in effluents to unrestricted areas; and

(2) That it is not likely that radioactive material discharged in the effluent would result in the exposure of an individual to concentrations of radioactive material in air or water exceeding the limits specified in Appendix B, Table II of this part.

(c) An application for higher limits pursuant to paragraph (b) of this section shall include information demonstrating that the applicant has made a reasonable effort to minimize the radioactivity discharged in effluents to unrestricted areas, and shall include, as pertinent:

(1) Information as to flow rates, total volume of effluent, peak concentration of each

radionuclide in the effluent, and concentration of each radionuclide in the effluent averaged over a period of one year at the point where the effluent leaves a stack, tube, pipe, or similar conduit;

(2) A description of the properties of the effluents, including:

(i) Chemical composition;

(ii) Physical characteristics, including suspended solids content in liquid effluents, and nature of gas or aerosol for air effluents;

(iii) The hydrogen ion concentration (pH) of liquid effluents; and

(iv) The size range of particulates in effluents released into air.

(3) A description of the anticipated human occupancy in the unrestricted area where the highest concentration of radioactive material from the effluent is expected, and, in the case of a river or stream, a description of water uses downstream from the point of release of the effluent.

(4) Information as to the highest concentration of each radionuclide in an unrestricted area, including anticipated concentrations averaged over a period of one year:

(i) In air at any point of human occupancy; or

(ii) In water at points of use downstream from the point of release of the effluent.

(5) The background concentration of radionuclides in the receiving river or stream prior to the release of liquid effluent.

(6) A description of the environmental monitoring equipment, including sensitivity of

the system, and procedures and calculations to determine concentrations of radionuclides in the unrestricted area and possible reconcentrations of radionuclides.

(7) A description of the waste treatment facilities and procedures used to reduce the concentration of radionuclides in effluents prior to their release.

(d) For the purposes of this section the concentration limits in Appendix B, Table II of this part shall apply at the boundary of the restricted area. The concentration of radioactive material discharged through a stack, pipe or similar conduit may be determined with respect to the point where the material leaves the conduit. If the conduit discharges within the restricted area, the concentration at the boundary may be determined by applying appropriate factors for dilution, dispersion, or decay between the point of discharge and the boundary.

(e) In addition to limiting concentrations in effluent streams, the Commission may limit quantities of radioactive materials released in air or water during a specified period of time if it appears that the daily intake of radioactive material from air, water, or food by a suitable sample of an exposed population group, averaged over a period not exceeding one year, would otherwise exceed the daily intake resulting from continuous exposure to air or water containing one-third the concentration of radioactive materials specified in Appendix B, Table II of this part.

(f) The provisions of paragraphs (a) through (e) of this section do not apply to disposal of radioactive material into sanitary sewerage systems, which is governed by § 20.303.

(g) In addition to other requirements of this part, licensees engaged in uranium fuel cycle operations subject to the provisions of 40 CFR Part 190, "Environmental Radiation Protection Standard for Nuclear Power Operations," shall comply with that part.